Catalogue of American Amphibians and Reptiles.

HARDY, LAURENCE M. 1973. *Pseudoficimia, P. frontalis.*

Pseudoficimia Bocourt
False ficimia

Pseudoficimia Bocourt, 1883:572. Type-species, *Pseudoficimia pulchra* Bocourt, 1883, [= *Toluca frontalis* Cope, 1864], by monotypy.

• CONTENT. A single monotypic species, *Pseudoficimia frontalis*, is recognized.

• DEFINITION. *Pseudoficimia* is a colubrid snake genus (following Hoffstetter, 1968, not Underwood, 1967) with the internasal and prefrontal scutes paired and in contact medially. The nasal is entire above and divided below the naris, and the rostral is bluntly pointed and slightly upturned. The species normally has one preocular, two postoculars, 1 + 2 temporals, 7 supralabials, and 7 infralabials. The loreal is absent, and supralabials 3 and 4 contact the eye. The dorsal scales are smooth with single apical pits, and are arranged in 17 rows at midbody. Anal ridges are absent, and the anal plate is divided. There are 13–17 maxillary teeth with the posterior one or two teeth enlarged and grooved on the posterior lateral surface; no maxillary diastema is present. There are 8–10 palatine teeth, and 13–19 dentary teeth (sometimes faintly grooved); pterygoid teeth were not counted. Hypapophyses are present on the anterior 28 vertebrae. The posterior margin of the supraoccipital bone is angular (rather than rounded), the posterior end of the mandible has a downward deflection, the medial process of the palatine bone is rectangular in shape, and the length of the nasal bone is more than twice its width.

The hemipenis of males is single with a simple sulcus spermaticus that extends to the apex. The proximal half has enlarged spines that are larger on each side of the sulcus spermaticus; the spines become smaller distally and are replaced by calyces on the distal ⅓ to ¼ of the organ. The *in situ* length is 6–13 ($\overline{X}$ = 9.1; N = 16) subcaudals. Females have well-developed hemipenes that are smaller (3–8; $\overline{X}$ = 6.3 subcaudals, *in situ*), with spines present on the basal ½; spines are more numerous near the sulcus spermaticus and are replaced distally by calyces with smooth ridges. A simple sulcus spermaticus terminates proximal to the apex.

• DESCRIPTIONS, ILLUSTRATIONS, DISTRIBUTION, FOSSIL RECORD, PERTINENT LITERATURE. See species account.

• REMARKS. The false ficimia has been referred to *Toluca* (Cope, 1864; *T. frontalis*), *Geagras* (Cope, 1875; *G. frontalis*), and *Contia* (Boulenger, 1894; *C. frontalis* and *C. pulchra*).

• ETYMOLOGY. *Pseudoficimia* is derived from the Greek (*pseudo*, meaning false, and *ficimia*, alluding to its resemblance to snakes of the genus *Ficimia*).

Pseudoficimia frontalis (Cope)
False ficimia

Toluca frontalis Cope, 1864:167. Type-locality, "Colima." Holotype, U. S. Nat. Mus. 31425, an adult male collected by Xantus (examined by author).

Geagras frontalis: Cope, 1875:142.

Pseudoficimia pulchra Bocourt, 1883:572. Type-locality, "Mexique"; more specific locality unknown. Holotype, Museum National D'Histoire Naturelle 1515, subadult female (S.V. = 258 mm) collected by Boucard in 1868 (examined by author).

Ficimia frontalis: Garman, 1883:82.

Pseudoficimia frontalis: Günther, 1893:96. *Pseudoficimia pulchra* Bocourt relegated to synonymy of *P. frontalis*.

Contia frontalis: Boulenger (in part), 1894:270.

Conopsis frontalis: Amaral, 1929:182.

Pseudoficimia pulcherrima Taylor and Smith, 1942:246. Type-locality, "Huajintlán, southern Morelos." Holotype, E. H. Taylor–H. M. Smith collection 5497 (= Field Mus. Natur. Hist. 100061), subadult male (S.V. = 266 mm) collected by E. H. Taylor, 25 August 1938 (examined by author).

Pseudoficimia hiltoni Bogert and Oliver, 1945:375. Type-locality, "Guirocoba, Sonora." Holotype, Amer. Mus. Natur. Hist. 63717, adult male collected by John W. Hilton in 1941 (examined by author).

Pseudoficimia frontalis hiltoni: Campbell and Simmons, 1962: 196.

• CONTENT. Two subspecies have been recognized (Campbell and Simmons, 1962), but the species is currently considered to be monotypic (Hardy, 1969, 1972).

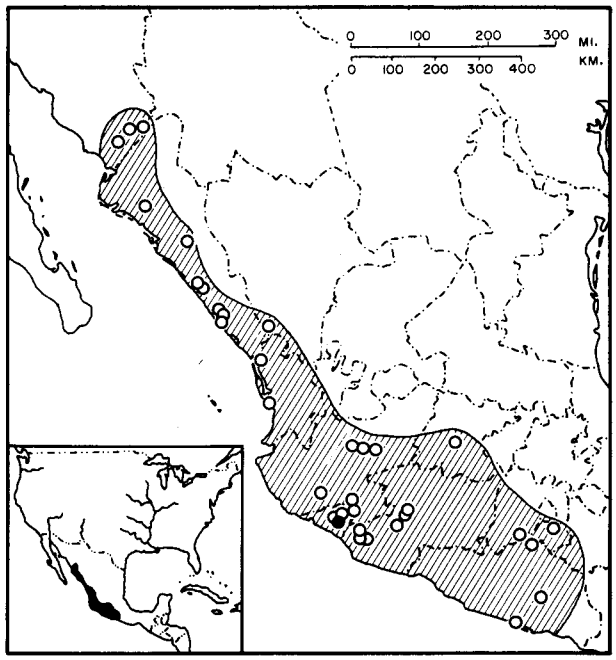
• DEFINITION. See generic definition.

• DESCRIPTIONS. The holotype was described briefly by Cope (1864); the description was supplemented by Taylor and Smith (1942). Descriptions of additional specimens of this rare species were presented by Taylor and Smith (1939) and Taylor (1940). Scutellation for ten specimens was summarized by Taylor and Smith (1942). Hardy (1970, 1972) described various aspects of the color pattern, scutellation, dentition, osteology, hemipenis, and soft anatomy. Bogert and Oliver (1945) described stomach contents of the holotype of *P. hiltoni*. Peters (1954) gave color notes on the scales and eye of living specimens. Other individual descriptions have been presented by Duellman (1958), Campbell and Simmons (1962), Hensley and Lannom (1966), and Hardy and McDiarmid (1969).

• ILLUSTRATIONS. Whole body and sectional closeup photographs of the holotype and paratype of *Toluca frontalis* are figured in Hardy (1972). The holotype of *P. pulcherrima* is pictured by Taylor and Smith (1942) and Hardy (1972). Photographs of the holotype of *P. hiltoni* appear in Bogert and Oliver (1945) and Hardy (1972). Photographs of other preserved specimens are found in Taylor and Smith (1939, 1942), and Hardy (1972) has figured a living specimen.

Photomicrographs of histological sections of the ovary, oviduct, epoöphoron, testis, epididymis, and adrenal gland, and photographs of the hemipenis of both sexes appear in Hardy (1970). Line drawings of various aspects of the head are presented in Bocourt (1883), Taylor and Smith (1942), and Bogert and Oliver (1945). A maxilla is illustrated in Taylor and Smith (1942). No color illustrations have been published.

• DISTRIBUTION. *Pseudoficimia frontalis* is distributed in tropical thorn woodland of southern Sonora and Sinaloa, in tropical semiarid forest and tropical dry forest of



MAP. The solid symbol marks the type-locality. Hollow symbols mark other known localities.

southern Sinaloa at elevations up to 300 meters above sea level (Hardy and McDiarmid, 1969), in arid scrub forest of Michoacan at elevations below 1100 meters, and in similar habitats at lower elevations in Guerrero and Colima (Duellman, 1958, 1961), Morelos (Taylor, 1940), Jalisco (Smith, 1943), Guanajuato (Schmidt and Shannon, 1947), and Puebla (Webb and Fugler, 1957). It is also found in the tropical deciduous forest of Durango (Webb and Baker, 1962), and the state of Mexico (Hardy, 1972). The distributional limits are best known for the northern part of the range.

• FOSSIL RECORD. None.

• PERTINENT LITERATURE. The pre-1900 literature on *Pseudoficimia* consists of the original description (Cope, 1864), and a few accounts of individual specimens. Taylor and Smith's (1942) report was based on ten specimens and served as the first revision of the genus. Bogert and Oliver described *P. hiltoni* in 1945 and included data on feeding habits. The accounts published during the next 20 years were mainly distribution and habitat descriptions. Duellman (1961) questioned the validity of *P. pulcherrima*, and Campbell and Simmons (1962) reduced *P. hiltoni* to a subspecies of *P. frontalis*. Hardy and McDiarmid (1969) discussed geographic variation and synonymized *P. hiltoni* with *P. frontalis*. Hardy (1970) placed *P. pulcherrima* in the synonymy of *P. frontalis* and reported the species to be intersexual, with females having well-developed hemipenes. Hardy (1972) summarized the literature and presented a taxonomic revision.

• ETYMOLOGY. The specific epithet (*frontalis*) is Latin (*front*, forehead; *-alis*, pertaining to) and apparently refers to the dark interorbital bar.

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